

Analysis of Findings from the Buckeye Knoll Site (41VT98), Victoria County, Texas

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Prepared for
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The following tasks relevant to analysis of the Buckeye Knoll site have been accomplished as of this writing (12/01/2003):

1. Quantifications (in numbers and metric weights) of various classes on cultural debris from midden (non-mortuary) contexts. The said classes include 1) lithic debitage, 2) faunal bone specimens, 3) freshwater and estuarine/brackish-water shell specimens (with subdivisions according to taxa), 4) burned clay nodules, 5) fire-cracked rock, 6) ceramics, and 7) lithic tools and diagnostics. Extensive tabulation of results has been completed, with the result that absolute numbers and relative densities of each class of debris is recorded according to units, levels, and defined strata. In addition to the tabulations, line graphs have been prepared for units showing the changes in numbers and weights for each debris class by excavation levels (10-cm) and where appropriate, strata. These data will be the basis for a) identification of time-bounded cultural components at the site and b) selection of samples of faunal remains for radiocarbon dating of said components.
2. Metric measurements have been made and recorded for lithic tools and projectile points from mortuary and non-mortuary components.
3. Select samples of lithic debitage have been analyzed to determine numbers and percentages, by levels/strata, of specimens of several identified raw material types (e.g., chert, quartzite, silicified wood).
4. Select samples of lithic debitage are currently being analyzed to determine the numbers and relative proportions of flakes by types (primary, secondary, tertiary, biface thinning) and sizes. This data base, presently approximately one-half complete, will be used for inferences concerning the nature of lithic technological organization at 41VT98, and to determine if this aspect of adaptive behavior changed through the millennia of site occupation.
5. An analysis of the types of burned clay nodules/pieces from the two major excavation blocks (Knoll Top and West Slope) has been completed.
6. A select sample of faunal bone from units in the Knoll Top and West Slope was packaged and sent to the project zooarchaeologist for preliminary assessment (i.e., to provide guidelines for expanded analysis of a larger sample of faunal materials)

7. A series of detailed technical drawings of mortuary artifacts has been prepared and digitized for use in the final technical report.
8. A set of non-mortuary tools was selected for use-wear analysis and delivered to Texas A&M University (College Station) for high-power microscopic examination and photography.
9. A separate laboratory facility, strictly for use in the Buckeye Knoll bioarchaeological analyses, has been rented and refurbished adjacent to the department of anthropology of Florida State University in Tallahassee. A special dead-bolt-locked storage room has been built within the lab facility for safe storage of all parts of the collection when they are not actually under analysis. Phone lines, computer systems (and installation of analytically relevant software) and electronic security systems have been installed.
10. All human osteological materials from the burials at the site were packaged and transported to the FSU laboratory.
11. Burials best suited for various analyses (such as DNA, stable isotope and AMS dating) have been identified through consultation between R. Ricklis and G. Doran. The bases for selection include factors of probable age, sex, associated artifacts and mode of burial (i.e., body position).
12. Arrangements have been made for the DNA analyst, Dr. N. Tuross, to meet with Doran and Ricklis at the Tallahassee lab for procurement of samples (probably teeth) for collagen extraction for preliminary DNA analysis (which is scheduled for this winter), stable isotope analysis and AMS dating. These samples will be transported by Dr. Tuross to her laboratory facility at Harvard University.
13. Digital field photos made by Coastal Environments, Inc. have been inserted into a computer data base at the Tallahassee lab for reference in inventorying the human osteological materials.
14. Data on comparative skeletal samples (primarily cranial) has been collected and added to the existing computerized data files at FSU.